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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,262	07/18/2003	Arnaud Mainnemare	1254-03	4220
35811	7590	10/19/2007	EXAMINER	
IP GROUP OF DLA PIPER US LLP			KIM, JENNIFER M	
ONE LIBERTY PLACE				
1650 MARKET ST, SUITE 4900			ART UNIT	PAPER NUMBER
PHILADELPHIA, PA 19103			1617	
			MAIL DATE	DELIVERY MODE
			10/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/622,262	MAINNEMARE, ARNAUD	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jennifer Kim	1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 7/30/2007.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 20-22,25 and 26 is/are pending in the application.
- 4a) Of the above claim(s) 20-22,25 and 26 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 20,22,25 and 26 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ .  | 6) <input type="checkbox"/> Other: _____ .                        |

## **DETAILED ACTION**

The amendment filed April 23, 2007 and July 30, 2007 have been received and entered into the application.

### **Action Summary**

The rejection of claims 20, 22, 25 and 26 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement is hereby expressly withdrawn in view of Applicant's amendment.

The rejection of claims 20 and 22 under 35 U.S.C. 112, first paragraph (enablement) is hereby expressly withdrawn in view of Applicant's amendment.

The rejection of claims 20, 22, 25 and 26 under 35 U.S.C. 112, second paragraph is hereby expressly withdrawn in view of Applicant's amendment.

The rejection of claims 20, 22, 25 and 26 under 35 U.S.C. 103(a) as being unpatentable over Julich et al. (1993) is hereby expressly withdrawn in view of Applicant's persuasive argument that chloramine T as disclosed by Julich and the taurine N-chloramine as disclosed by the Applicant are two completely different molecules.

## **Response to Arguments**

Applicant's arguments with respect to claims 20, 22, 25 and 26 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 20, 22, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Julich et al. (1993) of record and Nagl et al. (1998) in view of Contreras et al. (1997).

Julich et al. teaches that sodium hypochlorite (NaOCl) both have antiviral activity. (page 310, Table 3). Julich et al. teach that due NaOCl's excellent compatibility with various materials, it may be used for the disinfecting dentures. (page 311 right-hand side second full paragraph).

Nagl et al. teach that N-chlorotaurine is known to have bactericidal, fungicidal and vermicidal properties. Nagl et al. teach that N-chlorotaurine also demonstrated having virucidal activity including HSV-1 and 2. Nagl et al. teach that N-chlorotaurine in destruction of pathogens during inflammatory reactions and has application as an antiviral agent in human medicine. (abstract, table 1, page 27 under results).

Contreras et al. teach that herpesviruses have been implicated in the pathogenesis of human periodontitis. (abstract).

The claims differ from the cited references in claiming combination of NaOCl and N-chlorotaurine for the treatment of lesions and infections generated from periodontitis and herpesvirdiae and the mechanism of action of substantial stimulation of myeloperoxidase activity in the human or animal.

To employ combinations of NaOCl and N-chlorotaurine to treat lesions and infections generated from herpesviridiase and periodontitis would have been obvious because all the components are well known individually for having virucidal activity (HSV) and bactericidal activity. It would be expected that the combination of components would treat infections generated from conditions involving bacteria or virus including peridonitis and herpesviridae as well. The motivation for combining the components flows from their individually known common utility (see In re Kerkhoven,

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205 USPQ 1069(CPPA 1980)). Further, the treatment of lesions and infections generated from periodontitis is obvious because herpesviruses have been implicated in the pathogenesis of human periodontitis as taught by Contreras. One would have been motivated to treat lesions and infection generated from periodontitis by employment of the obvious combination of NaOCl and N-chlorotaurine taught by Julich et al. and Nagl in order to achieve an expected additive benefit of antiviral activity. Moreover, the mechanism of action of without substantial stimulation of myeloperoxidase activity in the human or animal is obviously achieved by the obvious modification involving same active agents for the same treatment.

Thus, the claims fail to patentably distinguish over the state of the art as represented by the cited references.

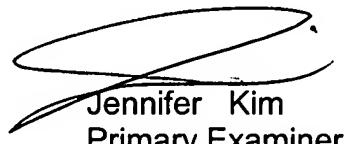
For these reasons the claimed subject matter is deemed to fail to patentably distinguish over the state of the art as represented by the cited references. The claims are therefore properly rejected under 35 U.S.C. 103.

None of the claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Kim whose telephone number is 571-272-0628. The examiner can normally be reached on Monday through Friday 6:30 am to 3 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jennifer Kim  
Primary Examiner  
Art Unit 1617

Jmk  
October 8, 2007